

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A pick-up head, ~~said the pick-up head~~ utilizing ~~a way of~~ electric reading / electric writing to access data on a disk, the disk being provided with a ferroelectric material, the pick-up head comprising:

a signal-writing unit, a voltage being provided by the signal-writing unit to write down the data on the disk;

a signal-processing unit, an electric signal read from a data-storing surface on the disk being processed by the signal-processing unit; and

a pair of conductive wires extended from the signal-writing unit and the signal-processing unit, the ends of the pair of conductive wires being separated by a gap, the voltage ~~being~~ applied by the signal-writing unit on the pair of conductive wires ~~to generate~~ generating an electric field around the gap so as to polarize the data-storing surface on the disk to write the data, the ends of the pair of conductive wires being approached to the data-storing surface to induce ~~the situation of polarizing~~ polarization of the data-storing surface and the electric signals read from the disk being transmitted to the signal-processing unit.

2. (Currently Amended) The pick-up head according to claim 1, further comprising a switch for determining the pair of conductive wires ~~being~~ connected to one of the signal-writing unit and the signal-processing unit.

3. (Previously Presented) The pick-up head according to claim 1, further

comprising a pedestal for fixing the pair of conductive wires so as to control the positions of the ends of the pair of conductive wires.

4. (Currently Amended) A pick-up head, ~~said the~~ pick-up head utilizing ~~a way of~~ optical reading / electric writing to access data on a disk, the disk being provided with a ferroelectric material, the pick-up head comprising:

a signal-writing unit, a voltage being provided by the signal-writing unit to write down the data on the disk;

a pair of conductive wires extended from the signal-writing unit, the ends of the pair of conductive wires being separated by a gap, the voltage ~~being~~ applied by the signal-writing unit on the pair of conductive wires ~~to generate~~ generating an electric field around the gap so as to polarize the data-storing surface on the disk to write the data;

a laser diode for emitting a laser beam to read the data written by the pair of conductive wires;

an object lens for focusing the laser beam on the data-storing surface on the disk to turn into a reading optical point; and

a photodetector for translating a reflective beam from the reading optical point into a electric signal.

5. (Previously Presented) The pickup head according to claim 4, further comprising:

a collimator for coping with the laser beam emitted from the laser diode into a parallel optical beam;

a polarization beam splitter for separating the laser beam emitted from the laser diode and the reflective beam from the reading optical point; and

a focusing lens for focusing the reflective beam from the polarization beam splitter on the photodetector.

6. (Previously Presented) The pickup head according to claim 4, further comprising a pedestal for fixing the pair of conductive wires so as to control the positions of the ends of the pair of conductive wires.

7. (Currently Amended) A method for accessing data by a pick-up head, the pick-up head utilizing ~~a way of~~ electric reading / electric writing to access the data on a disk, the disk being provided with a ferroelectric material, the method comprising the steps of:

exerting a voltage on a pair of conductive wires on the pick-up head while writing, thereby generating an electric field between the pair of conductive wires;

~~letting approaching~~ the electric field ~~approach to~~ the disk so as to polarize a data-storing surface made by the ferroelectric material to write down the data;

utilizing the ends of the pair of conductive wires to induce the polarized electric charges on the data-storing surface; and

processing electric signals which individually represent the polarized electric charges.

8. (Previously Presented) The method according to claim 7, further comprising utilizing a polarized area on the data-storing surface to represent one of a digital data 1

and 0, and utilizing an unpolarized area on the data-storing surface to represent the other of the digital data 1 and 0.

9. (Previously Presented) The method according to claim 7, further comprising providing a pedestal for fixing the pair of conductive wires so as to control the positions of the ends of the pair of conductive wires.

10. (Currently Amended) A method for accessing data by a pick-up head, the pick-up head utilizing ~~a way of~~ optical reading / electric writing to access the data on a disk, the disk being provided with a ferroelectric material, the method comprising ~~comprising~~ the steps of:

exerting a voltage on a pair of conductive wires on the pick-up head while writing, thereby generating an electric field between the pair of conductive wires;

~~letting approaching~~ the electric field ~~approach to~~ the disk so as to polarize a data-storing surface made by the ferroelectric material to write down the data;

casting a laser beam while reading, the laser beam passing through an object lens and focusing on the data-storing surface to turn into a reading optical point; and

utilizing a photodetector to receive a reflective beam from the reading optical point and translating the reflective beam to an electric signal.

11. (Previously Presented) The method according to claim 10, further comprising utilizing a polarized area on the data-storing surface to represent one of a digital data 1

and 0, and utilizing an unpolarized area on the data-storing surface to represent the other of the digital data 1 and 0.

12. (Previously Presented) The method according to claim 10, further comprising providing a pedestal for fixing the pair of conductive wires so as to control the positions of the ends of the wires.